

ABSTRACT

A combustor for a gas turbine includes a combustor body having an aperture and a casing enclosing the combustor body and defining a passageway therebetween for carrying compressor discharge air. There is at least one injection tube for supplying an amount of the compressor discharge air into the combustor body and the injection tube is disposed between the aperture and through the casing. A collar is disposed at the passageway and surrounds the injection tube so that the injection tube passes through the collar. A gap is disposed between the collar and the injection tube. The collar has a plurality of openings. A method for quenching combustion in a gas turbine includes supplying a fixed amount of compressor discharge air into a body of a combustor of the gas turbine and supplying a variable amount of compressor discharge air into the body. The fixed amount of compressor discharge air is disposed concentrically around the variable amount of compressor discharge air.